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EXAMINER
BURLESON, MICHAEL L

ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/560,730	YAMAGUCHI ET AL.
Office Action Summary	Examiner	Art Unit	
	MICHAEL BURLESON	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>27 May 2009</u>.
2a) ☒ This action is FINAL.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-27 and 29</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-27 and 29</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some * c) ☐ None of:
       1. ☒ Certified copies of the priority documents have been received.
       2. ☐ Certified copies of the priority documents have been received in Application No. _____.
       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 05/27/2009 have been fully considered but they are
not persuasive.

2.   Regarding 112 rejection, claims 13, 14, 17, 18, 21, 22 and 29 still teach of "an
area not normally constituting". Examiner fails to understand what this term means.

3.   In view of the 112 rejection, as best understood by the Examiner, the rejection of
these claims is maintained.

4.   Regarding claims 1-27 and 29, Applicant teaches that Duwaer fails to teach of
correcting data outside of the area to be corrected. Examiner disagrees with Applicant.
As best understood by Examiner as stated by the claim language, Duwaer detects and
corrects misconvergence of an image by measuring luminance from the screen that the
image is projected on (abstract and column 7, lines 10-27). As best understood by
Examiner, the composite image is the test image, the areas of misconvergence are the
excluded portion and the projection screen is the area of the entire image. These
claims remain rejected.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

   The specification shall conclude with one or more claims particularly pointing out and distinctly
   claiming the subject matter which the applicant regards as his invention.

6.   Claims 1, 13, 14, 17, 18, 21, 22 and 29 rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

7.   Regarding claim 1, states "calculated by setting the portion to be complemented

so as to include at least the excluded portion…" Examiner fails to see how any

calculation is taking place by setting a portion of an area.

8.   Regarding claims 13, 14, 17, 18, 21, 22 and 29 still teach of "an area not

normally constituting". Examiner fails to understand what this term means.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

    A person shall be entitled to a patent unless –

    (b) the invention was patented or described in a printed publication in this or a foreign country or in public
    use or on sale in this country, more than one year prior to the date of application for patent in the United
    States.

2.   Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Duwaer

US 4835602.

3.   Regarding claim 1, As best understood by Examiner, Duwaer teaches a method

of calculating correction data for correcting display characteristic, comprising the steps

of:

4.	displaying a test pattern image on an image display device;

obtaining capture data by capturing the test pattern image displayed by the image

display device (column 3, lines 7-9 and column 5, lines 11-16); and

5.	calculating correction data for correcting a display characteristic of the test

pattern image displayed by the image display device based on the obtained capture

data (column 5, lines 48-60),

6.	wherein, when the obtained capture data of the test pattern image excludes a

portion of the entire test pattern data, correction data relating to an entire image relating

to the test pattern image including correction data relating to the excluded portion is

calculated by setting the portion to be complemented so as to include at least the

excluded portion and complementing the portion to be complemented based on

correction data relating the area of the entire image excluding the area to be

complemented (column 7, lines 10-32).

7.	Regarding claim 2, Duwaer teaches wherein the test pattern data is generated

before the test pattern is displayed on the image display device (column 7, lines 10-16).

8.	Regarding claim 3, Duwaer teaches wherein the display characteristic includes at

least one of a geometric characteristic, a color characteristic, a luminance characteristic,

a white balance characteristic and a gamma characteristic (column 7, lines 16-28).

9.	Regarding claim 4, Duwaer teaches wherein the display characteristic includes at

least one of a geometric characteristic, a color characteristic, a luminance characteristic,

a white balance characteristic and a gamma characteristic (column 7, lines 16-28).

10.   Regarding claim 5, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by: obtaining capture data relating to the entire image relating to the test pattern data by complementing capture data of the area to be complemented based on capture data of the area excluding the area to be complemented; and calculating correction data relating to the entire image relating to the test pattern data based on the obtained capture data (column 7, lines 16-28).

11.   Regarding claim 6, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by:

12.   obtaining capture data relating to the entire image relating to the test pattern data by complementing capture data of the area to be complemented based on capture data of the area excluding the area to be complemented; and calculating correction data relating to the entire image relating to the test pattern data based on the obtained capture data (column 7, lines 10-28).

13.   Regarding claim 7, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by: calculating correction data of the area excluding the area to be complemented based on the capture data of the area excluding the area to be complemented; and complementing correction data of the area to be complemented based on the calculated correction data of the area excluding the area to be complemented (column 7, lines 10-28).

14.   Regarding claim 8, Duwaer teaches wherein the calculation of correction data of the area • to be complemented is performed by: calculating correction data of the area excluding the area to be complemented based on the capture data of the

area excluding the area to be complemented; and complementing correction data of the area to be complemented based on the calculated correction data of the area excluding the area to be complemented (column 7, lines 10-28).

15.   Regarding claim 9, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by:

calculating correction data of the entire area of the image relating to the capture data based on the capture data; and complementing correction data of the area to be complemented based on the correction data of the area excluding the area to be complemented in the calculated correction data (column 7, lines 10-28).

16.   Regarding claim 10, Duwaer teaches wherein the calculation of correction data of the area to be complemented is performed by: calculating correction data of the entire area of the image relating to the capture data based on the capture data; and complementing correction data of the area to be complemented based on the correction data of the area excluding the area to be complemented in the calculated correction data (column 7, lines 10-28).

17.   Regarding claim 11, Duwaer teaches wherein an image relating to the capture data is displayed before the area to be complemented is set; and the area to be complemented is set in accordance with a manual operation for the displayed image (column 5, lines 48-64).

18.   Regarding claim 12, Duwaer teaches wherein an image relating to the capture data is displayed before the area to be complemented is set; and the area to be

complemented is set in accordance with a manual operation for the displayed image
(column 5, lines 48-64).

19.   Regarding claim 13, Duwaer teaches wherein based on a result of recognition of
an area that does not normally constitute the image relating to the test pattern data, the
recognition being made by analyzing the capture data, the area to be complemented is
automatically set so as to include the recognized area (column 5, lines 48-64).

20.   Regarding claim 14, Duwaer teaches wherein, based on a result of recognition of
an area that does not normally constitute the image relating to the test pattern data, the
recognition being made by analyzing the capture data, the area to be complemented is
automatically set so as to include the recognized area (column 5, lines 48-64).

21.   Regarding claim 15, Duwaer teaches wherein the analysis of capture data is
performed by comparing multiple capture data corresponding to multiple test pattern
data (column 7, lines 10-28).

22.   Regarding claim 16, Duwaer teaches wherein the analysis of capture data is
performed by comparing multiple capture data corresponding to multiple test pattern
data (column 7, lines 10-28).

23.   Regarding claim 17, Duwaer teaches wherein, the area to be complemented is
automatically set so as to constitute the recognized area based on a result of
recognition of an area that does not normally constitute the image relating to the test
pattern data, the recognition being made by analyzing correction data of the entire area
of the image relating to the capture data (column 7, lines 10-28).

24.   Regarding claim 18, Duwaer teaches wherein, the area to be complemented is
automatically set so as to constitute the recognized area based on a result of
recognition of an area that does not normally constitute the image relating to the test
pattern data, the recognition being made by analyzing correction data of the entire area
of the image relating to the capture data (column 7, lines 10-28).

25.   Regarding claim 19, Duwaer teaches wherein the analysis of capture data is
performed by comparing correction data of the entire area of the images relating to
multiple capture data corresponding to multiple test pattern data (column 7, lines 10-28).

26.   Regarding claim 20, Duwaer teaches wherein the analysis of capture data is
performed by comparing correction data of the entire area of the images relating to
multiple capture data corresponding to multiple test pattern data (column 7, lines 10-28).

27.   Regarding claim 21, Duwaer teaches wherein an obstacle is detected by using
an obstacle detecting device before the area to be complemented is set; and the area to
be complemented is automatically set so as to constitute the area based on a result of
recognition of an image area corresponding to the detected obstacle as an area that
does not normally constitute the image relating to the test pattern data (column 7, lines
10-32).

28.   Regarding claim 22, Duwaer teaches wherein an obstacle is detected by using
an obstacle detecting device before the area to be complemented is set; and
the area to be complemented is automatically set so as to constitute the area based on
a result of recognition of an image area corresponding to the detected obstacle as an

area that does not normally constitute the image relating to the test pattern data

(column 7, lines 10-32).

29.   Regarding claim 23, Duwaer teaches wherein data of the area to be

complemented is complemented by copying data of the area excluding the area to be

complemented thereto (column 7, lines 10-28).

30.   Regarding claim 24, Duwaer teaches wherein the complementing of the data of

the area to be complemented is calculated from the data of the area excluding the area

to be complemented based on a predetermined correlation (column 5, lines 1-32 and

column 7, lines 10-28).

31.   Regarding claim 25, Duwaer teaches wherein the predetermined correlation is a

distance between the position of a part to be complemented in the area to be

complemented and the position at which complementing data exists in the area

excluding the area to be complemented (column 5, lines 1-32).

32.   Regarding claim 26, Duwaer teaches wherein the image display device is a

projection device including a projector for projecting an image and a screen for

displaying the image projected by the projector (column 3, lines 6-9).

33.   Regarding claim 27, Duwaer teaches wherein the image display device is a multi-

projection device having multiple projectors each for projecting a partial image and a

screen for displaying images projected by the multiple projectors and constructing one

image as a whole by arranging partial images projected by the projectors on the screen

in such a manner that the images are superimposed one over another at the edges of

adjacent partial images (column 3, lines 6-18).

34.   and calculate, based on the obtained capture data, correction data for correcting

a display characteristic of the image display device (column 5, lines 48-60),

35.   wherein, when the obtained capture data does not normally constitute an entire

image relating to the test pattern data, correction data relating to an entire image

relating to the test pattern data including correction data of an area to be complemented

is calculated by setting the area to be complemented so as to include the not-normally-

constituting area and complementing the area to be complemented based on the area

excluding the area to be complemented (column 7, lines 10-32).

36.   Regarding claim 29, Duwaer teaches an apparatus for calculating correction data

for correcting display characteristic, the apparatus comprising:

37.   a capturing device for capturing a test pattern displayed on an image display

device based on test pattern data and obtaining capture data (column 3, lines 7-9 and

column 5, lines 11-16);

38.   and a calculating device for calculating, based on the

obtained capture data, correction data for correcting a display characteristic of the

image display device (column 5, lines 48-60),

39.   wherein, when the obtained capture data does not normally constitute an entire

image relating to the test pattern data, correction data relating to an entire image

relating to the test pattern data including correction data of an area to be complemented

is calculated by setting the area to be complemented so as to include the not-normally-

constituting area and complementing the area to be complemented based on the area

excluding the area to be complemented (column 7, lines 10-32).

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in
this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within
TWO MONTHS of the mailing date of this final action and the advisory action is not
mailed until after the end of the THREE-MONTH shortened statutory period, then the
shortened statutory period will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
the advisory action. In no event, however, will the statutory period for reply expire later
than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Michael Burleson
whose telephone number is (571) 272-7460 and fax number is (571) 273-7460. The
examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If
attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Twyler Haskins can be reached at (571) 272-7406.

Michael Burleson
Patent Examiner
Art Unit 2625

Mlb
December 19, 2008

/Michael Burleson/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625